



## Record of Modification

Phase 1 Site Characterization Sampling and Analysis Plan Field Activities  
Columbia Fall Aluminum Company RI/FS  
Phase 1 SAP MOD #5

**Instructions to Requester:** Submit to Roux RI Manager or Roux RI/FS Project Manager  
Roux RI Manager will maintain legible copies in a binder that can be accessed by personnel.

### Project Work Plan/QAPP (check one):

☒ 2015 Phase 1 SAP

☐ SOP (Title, # and approval  
date): \_\_\_\_\_

Requester: Amy Hoffmann, Field Manager

Date: 7/21/2016

### Applicable section of SAP/SOP:

SAP Section 4.7: Monitoring Well Installation

### Description of Modification:

An additional Water Table Monitoring Well, CFMW-056b, will be installed adjacent to Deep Monitoring Well CFMW-056a and Existing Monitoring Well CFMW-056 (CFMW-056 is the new identifier for existing well TW-11). A figured is attached showing the location of CFMW-056, 056a and 056b relative to Site features.

### Rationale for Modifications / Potential Implications of Modifications:

During the drilling of the borehole for deep monitoring well CFMW-056a, an initial water bearing zone was encountered from 36 to 107 ft bgs, followed by lower permeability conditions from a depth of 107 to 121 ft bgs (fine sand and silt with some clay). Based on these observations, deep monitoring well CFMW-056a was installed beneath the low permeability layer and screened from 125 to 135 ft bgs, in accordance with the SAP.

Depth to bottom at existing monitoring well CFMW-056 was gauged on April 26, 2016 and was measured to be 162 ft bgs. According to records, the existing well was installed as an open bottom well with no screen.

Monitoring well CFMW-056b was added to the scope to evaluate conditions immediately beneath the water table. The added well was screened from 40-50 ft bgs.

**Duration of Modification (Check one):**

☒ Temporary

Date(s) 7/19/2016

Sample Numbers Drilling location CFMW-056a


☐ Permanent (Proposed Text Modification Section)

Effective Date: \_\_\_\_\_

**Proposed Text Modifications in Associated Document:**

Data Quality Indicator (check one) – Please reference definitions on next page for direction on selecting data quality indicators:

☒ Not Applicable    ☐ Reject    ☐ Low Bias    ☐ Estimate    ☐ High Bias    ☐ No Bias

Roux Project Manager Approval: Andrew Baris  Date: 7/21/2016  
(Roux RI/FS Project Manager or designate)

EPA Review and Approval: Mike Cirian Date: \_\_\_\_\_  
(USEPA RPM or designate)

## DATA QUALITY INDICATOR DEFINITIONS

***Reject*** – Samples associated with this modification form are not useable. The conditions outlined in the modification form adversely affect the associated sample to such a degree that the data are not reliable.

***Low Bias*** – Samples associated with this modification form are useable, but results are likely to be biased low. The conditions outlined in the modification form suggest that associated sample data are reliable, but estimated low.

***Estimate*** – Samples associated with this modification form are useable, but results should be considered approximations. The conditions outlined in the modification form suggest that associated sample data are reliable, but estimates.

***High Bias*** – Samples associated with this modification form are useable, but results are likely to be biased high. The conditions outlined in the modification form suggest that associated sample data are reliable, but estimated high.

***No Bias*** – Samples associated with this modification form are useable as reported. The conditions outlined in the modification form suggest that associated sample data are reliable as reported.